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INFORMATION REPORT

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FL[redacted]

50X1-HUM

COUNTRY	Germany (Russian Zone)	DATE DISTR.	17 August 1948
SUBJECT	Development Program of the Leuchtstoffwerk SAG "Isolator"	NO. OF PAGES	2
PLACE ACQUIRED	[redacted]	NO. OF ENCLS. (LISTED BELOW)	[redacted]
DATE OF INF[redacted]		SUPPLEMENT TO REPORT NO.	

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[redacted]

THIS IS UNEVALUATED INFORMATION FOR THE RESEARCH USE OF TRAINED INTELLIGENCE ANALYSTS

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[redacted]

[redacted] The following is the 1948 development program of the "Leuchtstoffwerk der SAG Isolator" in Steinbach/Thuringia. Although the plant was dismantled in March - April 1948, the information is passed on as being indicative of Russian interest and research.

Development of a luminous television substance for 6 - 12 kV, a white composition of great brightness, with small halation and controlled after-glow.

a. Preparation of two or three components whose spectral emission, when mixed in a certain ratio, gives white, i.e., determining of the color spot in the color triangle. Determining of the dependency of the common color spot upon the ratio of mixture. Deadline is May 1948.

b. Variation of the ratio of components in order to obtain the grain distribution necessary for a uniform sedimentation. Deadline is August 1948.

c. Adjusting of the after-glow of the various components, designing and construction of appropriate after-glow apparatus. Deadline is October 1948.

2. Development of a luminous television substance for 6 - 12 kV, white, no mixture.

[redacted] Comment: If a pure chemical, this is very interesting.) 50X1-HUM

a. Systematic research on all substances capable of luminescence for the solution of the problem. Deadline is September 1948.

3. Development of a luminous substance for Braun'sche tubes for photography of quick single traces of wave forms at a writin speed of 100,000 Km/sec and 20 kV.

a. Designing and construction of the test tube required for the problem, of the electro-technical device, and an apparatus for the measuring of the rate of light intensity increase for a given electron beam current of luminous substances. Deadline is July 1948.

b. Measuring of all useful luminous substances with the apparatus named under (a). Deadline is August 1948.

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c. Further development for improvement of the intensity and shortening of the light build-up time of the luminous substances found useful under (b). Deadline is December 1948.

4. Development of a luminous substance with an after-glow shorter than ZnO.

a. Design and construction of an after-glow apparatus for short after-glow periods. Deadline is August 1948.

b. Further development on ZnO. Deadline is October 1948.

c. Development of new luminous substances for the problem. Deadline not stated.

5. Development of a luminous substance whose emission bands lie in the ultra-violet spectrum, if possible at 360 - 380 m/u (sic , probably 3,600 - 3,800 Angstrom units), but no emission bands must appear in the visible spectrum.

a. Development and construction of a measuring device which facilitates the measuring of ultra-violet emission. Deadline is May 1948.

b. Measuring of the substances considered suitable for the solution of the problem. Deadline is July 1948.

c. Development of new luminous substances. Deadline is December 1948.

6. Development of a luminous substance for color television which changes its color when voltage is increased.

a. Start of tests with possibly suitable substances. Deadline not stated.

7. Development of three luminous substances for color television. Deadline is May 1948.

8. Development of double screen luminous substances (primarily useful for Moving Target Indicator scopes on air search radars).

a. A stimulating substance; measuring of the emission of substances used for that purpose. Deadline is March 1948.

b. After-glow substance; measuring of the spectral distribution of excitation, and adjustment of the after-glow substance's light sensitivity to use the maximal emission of the excitation substance. Deadline is June 1948.

Measuring of the light build-up rate and preparation of luminous substances with shortest build-up time. Deadline is October 1948.

Preparation of luminous substances with fixed build-up time. Deadline is December 1948.

The following apparatus are required for the research:

Ultra-violet spectrograph

Equipment to carry out structure analyses by x-ray

Material for the construction of electro-technical and high-frequency technical apparatus.

Deadlines cannot be met unless these apparatus are available.